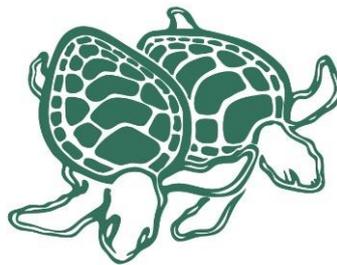


Submission to the NT Environmental Protection Authority:  
Draft Environmental Impact Statement for the proposed  
Northern Gas Pipeline  
Proponent: Jemena

October 2016



**Environment Centre NT**

protecting nature | living sustainably | creating a climate for change

## Executive Summary

This Draft EIS fails to demonstrate that the benefits of the proposed Northern Gas Pipeline outweigh the significant impacts it would have upon the environment and communities in the NT.

The Draft EIS does outline a number of environmental and social risks, some of which could potentially be managed, others which have been underestimated and could have a lasting detrimental impact.

ECNT has assessed this Draft EIS and determined that the most significant impacts associated with this proposed development include:

- an unsustainable level of water extraction from groundwater in the Barkly region, an arid zone, which could significantly deplete the groundwater aquifers of that region;
- the risk of contamination to surface and groundwater through the generation of large amounts of toxic wastewater during the hydrostatic testing and ongoing compressing of gas at the Phillip Creek site.
- the contribution the entire project will make to Australia's and the Northern Territory's already high climate impact;
- the loss of the opportunity to invest in plentiful clean and renewable energy resources at the expense of dirty fossil fuels, which contravenes the NT's own Renewable Energy Target as well as Australia's global commitments under the Paris Agreement;
- the flow-on effect the project would have in supporting the unnecessary expansion of 'unconventional' shale gas fracking in the NT whilst a moratorium for this activity is in place.

This project was presented by the Northern Territory Government in 2015 and released for tender without consultation with the community. ECNT considers it highly inappropriate that this business was conducted by the government at the same time as many communities throughout Australia and the NT voiced their considerable concerns about the impacts associated with an expanded shale gas industry in the NT.

No economic analysis was presented to members of the public to justify the significant amount of taxpayer funds used to support development of the Northern Gas Pipeline proposal. To date, the NT Government has failed to explain to the community the pressing need for such a pipeline or to listen to the community's significant concerns about the real potential for this project to support a rapid expansion of shale gas fracking in the NT.

Two independent reports released in 2015 and 2016 outline that the idea there is a growing market for gas on the eastern seaboard is a false one, which is likely to be driven by falling demand and increasing uptake of renewable energy sources. Both reports concluded that not only was the Northern Gas Pipeline unnecessary, it could prove to be a costly white elephant for the NT Government.

A third report released by the Climate Council in December 2015 outlined that Australia ranked last in the OECD countries according to its Climate Change Performance Index. The Climate Council again reiterated the ever-pressing need for Australia to immediately shift away from fossil fuels to reduce its greenhouse gas emissions to zero.

It is telling that the proponent, Jemena, does not put forward any real alternative to this development and that renewable energy sources are not explored as an alternative to gas at any point in the Draft EIS.

ECNT contends that there is a real and viable alternative to the proposed gas pipeline which would deliver far-reaching benefits to the NT, QLD and Australia. A large scale renewable energy project could fulfil the energy requirements of industry at Mount Isa, potentially input solar power to the National Electricity Market, generate no pollution and deliver multiple benefits to the environment and communities whilst contributing to the Renewable Energy Targets of NT, QLD and Australia.

Further, the proponent makes several presumptions in this Draft EIS:

- That Traditional Owners of the Wakaya Land Trust and Arruwurra Aboriginal Corporation will grant permission for land access to the proponent to support the Northern Gas Pipeline
- That an Authority Certificate will be granted by the Aboriginal Areas Protection Authority to certify the proponent has put sufficient management measures in place to ensure that it will not damage or disturb any Sacred Sites through this proposed development.
- That without any thorough assessment, assume that sufficient groundwater resources exist long term in the vicinity of the proposed Phillip Creek Compressor Station site to provide for extraction of 1.752ML per year without impacting upon domestic water supply to Tennant Creek, long-term sustainability of groundwater resources or nearby watercourses or springs.
- That evaporation ponds will effectively remove toxins from the 1.752ML of wastewater produced at the site, including during the wet season when large areas of the region are prone to flooding.
- That four threatened species potentially present in the region, but not captured during surveys over a 12 month period, will not be put at risk by this development.

These presumptions present unacceptable risks to the community, that the wishes of Traditional Owners will be ignored, and that the environmental impact of this proposal upon the Phillip Creek site in particular are grossly underestimated.

ECNT wishes to object to the approval of the proposed Northern Gas Pipeline on the following grounds.

1. That the proponent, Jemena, has failed to present a compelling case for why this proposed development should go ahead, given that the economic and medium-term employment benefits are at best negligible when weighed up against its costs.
2. That the NT Government has failed to consult the community about this proposal, or to investigate more sustainable alternatives, including a large scale solar plant project.
3. That in supporting this project to date, the NT Government has not taken into consideration the significant level of community opposition to shale gas fracking which it has acknowledged with a moratorium on shale gas fracking.
4. That in supporting this project to date, the NT Government is in conflict with its own Renewable Energy Target of 50% by 2030.
5. That a thorough assessment of the project's potential climate impact was not undertaken as part of the Draft EIS, which contravenes Australia's commitment to mitigate its greenhouse gas emissions under the 2015 Paris Agreement.
6. That the proponent, Jemena, has not attempted to offset this project's climate impact, water use or habitat loss.
7. That the proponent, Jemena, has made several presumptions in this Draft EIS which pose an unacceptable risk that the wishes of Traditional Owners of lands affected by this proposal will be ignored, and that the environmental impacts of this proposal are grossly underestimated.

8. That the amount of water proposed to be extracted via a Compressing Station at Phillip Creek site (4800 litres/day) is unsustainable, given the site is located in an arid zone where water is scarce and groundwater aquifers may take thousands of years to recharge.
9. That the amount of toxic wastewater produced from this same process is too large to be managed or treated appropriately without polluting the surrounding area and groundwater aquifers.
10. Insufficient information was provided to demonstrate that the amount of groundwater required to allow hydrostatic testing of the pipeline (22,000,000 litres) and construction (69,000,000 litres) as well as drinking water for construction camps (20,000,000 litres), equivalent to a total of 111 megalitres, is sustainable.
11. That the project requires clearing of a significant amount of remnant vegetation (2,470 ha).
12. That the Matters of National Environmental Significance were not properly considered as two species observed during surveys of the region over a 12 month period and three species determined to be likely to be present were considered to be at risk from the proposed development. Four species which are found in the region but were undetected during surveys were not considered to be at risk. These include the Greater Bilby, Brush-tailed Mulgara, Gouldian Finch and Latz's Grass. Another six species could occur in the region, including the Night Parrot and Princess Parrot which are notoriously rare. The risk of this proposal impacting upon these species should be properly assessed.

## Introduction

Environment Centre NT (Inc) is the Territory's leading community environment group.

The mission of the Environment Centre NT is to

- protect and restore biodiversity, ecosystems and ecological processes,
- foster sustainable living and development, and
- cut greenhouse gas emissions and build renewable energy capacity.

The Environment Centre NT works by

- advocating for the improvement of environmental policies and performance of governments, landholders, business and industry;
- partnering on projects and campaigns with conservation and climate organisations, governments, Indigenous organisations, community groups, businesses, and landholders;
- raising awareness amongst community, government, business and industry about environmental issues and assisting people to reduce their environmental impact;
- supporting community members to participate in decision making processes and action;
- recognising the rights, aspirations, responsibilities and knowledge of the Territory's Indigenous peoples; and,
- acknowledging that environmental issues have a social dimension.

For 35 years, ECNT has positively contributed to the development of environmental laws and policies in the NT, provided a voice for the community on environmental issues, educated community members about how they can reduce their environmental impact and put forward innovative and well-informed projects and policies.

## Analysis of the Draft EIS

### Project Justification

The following was provided by the proponent as justification for the Northern Gas Pipeline project.

- a) 'Stimulating the development of the NT through increased gas exploration and production'*
- b) 'Providing a new source of competitively-priced clean reliable energy to eastern Australia'*
- c) 'Implementing regional capacity building initiatives'*
- d) 'Contributing to the continued development of a liquid and competitive wholesale gas market'*

ECNT does not accept any of these justifications for reasons outlined below.

- a) Increased gas exploration and production will not necessarily generate benefits to the NT, but it will increase the NT's greenhouse gas emissions and support risky shale gas fracking activities. It will also steer investment away from clean, renewable energy sources and into developing gas resources.
- b) ECNT does not consider gas to be 'clean energy' when renewable, emission free energy sources are available as an alternative. The extraction, transport and burning of gas contributes to global warming through generating greenhouse gas emissions.
- c) Providing additional gas to eastern Australia may cause a flooding of the market, which would drive economic benefits down. Eastern Australia has more than enough gas to meet domestic demand; demand has been artificially created by the over-contracting of gas for

export. It is likely regional development as a result of the project will be negligible and very short-term considering it will only provide for less than 10 FTE jobs post-construction.

- d) This is not in itself a worthy goal considering that this enhances Australia's reliance on fossil fuels at a time when it has committed to shift toward a renewable energy economy. In fact, this contravenes Australia's commitment to the Paris Agreement, and to its Renewable Energy Targets. There is an opportunity instead to generate electricity from a large scale solar plant which could feed into the National Electricity Market via an underground cable.

As evidence of the dubious economic case for the Northern Gas Pipeline (then referred to as the North East Gas Interconnector), an independent report by the Australia Institute concluded the following:

*The North East Gas Interconnector (NEGI) is a proposed gas pipeline between the Northern Territory and the eastern states. The project is strongly endorsed by gas companies, the Territory government and governments in other states, but analysis is lacking as to the actual benefits to Territorians and the rest of Australia. While there is a shortage of analysis, there is no shortage of hyperbole. This paper busts four myths around the NEGI.*

*1. The project is important for solving the east coast gas 'crisis'*

*There is no east coast gas crisis. The eastern states are producing more gas than ever before and this is set to increase in the coming years. This is clearly shown in industry publications and is acknowledged by the Australian Energy Market Operator. Gas demand on the east coast is declining in response to high prices brought on by the recent commencement of exports to the world market.*

*2. The NEGI will reduce household gas prices*

*Australian domestic gas markets are now linked to world prices. Any production facilitated by the NEGI would have a minimal impact on world supply and therefore on Australian domestic gas prices.*

*3. The NEGI is important for NT government revenue*

*The NEGI is likely to make very little difference to the NT government's revenue. At present, royalties from all mining, petroleum and gas extraction makes up only 2.9 per cent of the NT government's revenue, \$164 million out of a total \$5,716 million in 2014-15. Put another way, 97 per cent of services in the NT are paid for by sources other than the mining and gas industries. The potential increase in gas extraction with the NEGI will not make a significant change to this.*

*4. The NEGI will bring jobs and infrastructure to remote areas*

*The gas industry is highly capital intensive and does not make many jobs once infrastructure is constructed. While several thousand people work on constructing the Ichthys project for example, at the time of the last 2011 census just 159 Territorians worked in the oil and gas industry. Nation-wide employment in oil and gas is 28,700, a fraction of one per cent of Australia's 12 million employed people. There is no incentive for gas companies to build any roads that they do not need and beyond the construction period they will not need to use those very often. Government investment in infrastructure around the NEGI must be subject to rigorous assessment and cost benefit analysis. The government should be putting its scarce resources into infrastructure projects that benefit Territorians, not gas companies.*

**Source: 'Passing Gas: Economic myths around the North East Gas Interconnector pipeline', The Australia Institute, August 2015, <http://www.tai.org.au/content/passing-gas-economic-myths-around-northern-territory-north-east-gas-interconnector-pipeline>**

The NT Government failed to respond to this report with its own economic analysis supporting the need to press ahead with the project, instead citing political messages about the need to support development of the NT's onshore gas resources.

In 2016, the Institute for Energy Economics and Financial Analysis released its economic analysis of the proposed Northern Gas pipeline in an effort to inform policy debate on the issue.

It concluded the following:

- a) *Recent downgrades suggest demand for the project is overstated*
- b) *The project raises questions over ownership, given the proponent Jemena is effectively owned by the Chinese and Singaporean governments*
- c) *The project would most likely be a loss-making enterprise*
- d) *The project is informed by official energy market forecasts that are overestimated*
- e) *The project is being built into a global glut of LNG*
- f) *A breakdown is occurring in how contracts are traditionally priced*
- g) *NT production is very high cost*

*For the NEGI to be built, substantial new fossil fuel subsidies from the Northern Territory government (through the PWC) and the federal government (through the Northern Australia Infrastructure Facility) will be required.*

*The NEGI has been conceived to compensate for a poor decision by the PWC to contract to buy too much gas. The commission overestimated demand, a common failing of government agencies, and is attempting now to on sell that gas. The NEGI is likely to fail, however, as it is a bad decision being promoted to cover up another bad decision.*

*Neither the NEGI nor the larger East Coast onshore gas export market has sufficient customers for their high-priced product.*

**Source: 'Pipe Dream: A Financial Analysis of the Northern Gas Pipeline', Institute for Energy Economics and Financial Analysis, May 2016, <http://ieefa.org/wp-content/uploads/2016/05/Pipe-Dream-A-Financial-Analysis-of-the-NEGI-MAY-2016.pdf>**

ECNT is very concerned about the ramifications of Power and Water Corporation over contracting its commitment to buy gas, for this generates unnecessary costs to our economy and locks the NT into further committing to extract and burn fossil fuels for no good reason. It requests that this situation be investigated and rectified as a matter of urgency.

A large investment in a fossil fuel project is in direct conflict with the Northern Territory's agreed Renewable Energy Target of 50% reduction by 2030 and Australia's commitments to mitigate its greenhouse gas emissions under the Kyoto Protocol and Paris Agreement.

Under the Paris Agreement, Australia agreed to implement an economy-wide target to **reduce greenhouse gas emissions by 26 to 28 per cent below 2005 levels by 2030** with a long-term goal to keep the increase in global average temperature to **well below 2°C** above pre-industrial levels.

Global temperatures have already risen to 1 degree above pre-industrial levels. Given the lag in climatic response to greenhouse gas emissions, the world's largest collaboration of scientists at the Intergovernmental Panel on Climate Change agree that a **rapid reduction in the burning of fossil fuels** is required to keep global warming below a 2 degree rise.

The IPCC made the following conclusions in its 2014 Summary Report for Policymakers:

*Human influence on the climate system is clear, and recent anthropogenic emissions of greenhouse gases are the highest in history. Recent climate changes have had widespread impacts on human and natural systems. {1}*

*Anthropogenic greenhouse gas emissions have increased since the pre-industrial era, driven largely by economic and population growth, and are now higher than ever. This has led to atmospheric concentrations of carbon dioxide, methane and nitrous oxide that are unprecedented in at least the last 800,000 years. Their effects, together with those of other anthropogenic drivers, have been detected throughout the climate system and are extremely likely to have been the dominant cause of the observed warming since the mid-20th century. {1.2, 1.3.1}*

*Continued emission of greenhouse gases will cause further warming and long-lasting changes in all components of the climate system, increasing the likelihood of severe, pervasive and irreversible impacts for people and ecosystems. Limiting climate change would require substantial and sustained reductions in greenhouse gas emissions which, together with adaptation, can limit climate change risks. {2}*

*Adaptation and mitigation are complementary strategies for reducing and managing the risks of climate change. Substantial emissions reductions over the next few decades can reduce climate risks in the 21st century and beyond, increase prospects for effective adaptation, reduce the costs and challenges of mitigation in the longer term and contribute to climate-resilient pathways for sustainable development. {3.2, 3.3, 3.4}*

*There are multiple mitigation pathways that are likely to limit warming to below 2°C relative to pre-industrial levels. These pathways would require substantial emissions reductions over the next few decades and near zero emissions of CO<sub>2</sub> and other long-lived greenhouse gases by the end of the century. Implementing such reductions poses substantial technological, economic, social and institutional challenges, which increase with delays in additional mitigation and if key technologies are not available. Limiting warming to lower or higher levels involves similar challenges but on different timescales. {3.4}*

**Source: Climate Change 2014 Synthesis Report: Summary for Policymakers (2014), IPCC, [https://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5\\_SYR\\_FINAL\\_SPM.pdf](https://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf)**

In December 2015, Australia's most eminent climate scientists at the Climate Council concluded Australia was the worst performing country on climate action in the OECD. It ranked Australia third last of 58 countries following its assessment of each country according to the Climate Change

Performance Index. (Source: 'Australia the bottom of the list for climate action', The Climate Council, December 2015, <https://www.climatecouncil.org.au/australia-bottom-of-the-list-for-climate-action>)

ECNT concludes that, in the face of the urgent need for climate action, there is no reasonable economic, environmental or social justification for the proposed Northern Gas Pipeline project and that on this basis alone, it should be scrapped and renewable energy alternatives explored in its place.

### Access

In its Draft EIS, Jemena presumes it will be granted access to all land tenures. It does not account for any opposition by landholders to its proposed agreement. This raises significant concerns about whether landholders will be heard and respected during the negotiation process.

ECNT is very concerned that no Authority Certificate has been granted by the Aboriginal Area Protection Authority. It is standard procedure for this to accompany a Draft EIS, particularly for a project of this size.

### Environmental Risks

#### *Native vegetation loss*

ECNT is concerned about the large amount of clearing of remnant native vegetation proposed to occur for this project – 2470 hectares. This represents significant disturbance and habitat loss, as well as an increase in carbon emissions. It does not accept that replanting of the site post-construction supports the same habitat values as the existing remnant vegetation.

#### *Water use*

ECNT is very concerned about how, when and where 22 ML of water will be extracted during construction, given that the project occurs within an arid zone where water is scarce.

ECNT is critically concerned about the amount of water proposed to be extracted at the Phillip Creek Compressing Station, in particular. 1.752ML each year represents an unsustainable amount of water to extract from a groundwater aquifer within an arid zone, where aquifers can take thousands of years to recharge.

#### *Production of large amounts of toxic wastewater*

ECNT does not accept that 1.752ML of toxic wastewater can be adequately treated with evaporation ponds at the Phillip Creek site given the very large volume of water and that the region experiences widespread seasonal flooding.

#### *Spread of weeds during construction*

ECNT is concerned that the risk of spread of weeds during construction is too high, and this presents an additional management cost for landholders as well as a threat to the ecological values of the region.

#### *Biodiversity and Matters of National Environmental Significance*

The Draft EIS considers only two threatened species observed during surveys of the region over a 12 month period and three threatened species determined to be very likely to be present were considered to be at risk from the proposed development. Four threatened species which are found in the region but were undetected during surveys were not considered to be at risk. These include the Greater Bilby, Brush-tailed Mulgara, Gouldian Finch and Latz's Grass. Another six species could

occur in the region, including the Night Parrot and Princess Parrot which are notoriously rare. The risk of this proposal impacting upon these species should be properly assessed

### Economic and Social Risks

ECNT considers the proposed total benefit of \$1.379billion to Australia (\$213mill to NT) to be marginal given the very high cost of construction, gas extraction and compression, large amounts of groundwater required, risk of contamination, contribution to Australia's greenhouse gas emissions, the risk of steering investment away from developing renewable energy sources, declining fossil fuel markets and the low number of ongoing jobs created (less than 10).

### Employment

ECNT supports the NT to move away from its traditional 'boom-bust' economic cycles which isolate communities and instead support slow growing projects which build community capacity, confidence and participation. It does not consider 10 FTE jobs post-construction to be a viable regional development project.

### Traffic

ECNT contends that the cost of road upgrades resulting from increased traffic along the Barkly Highway should be borne by the proponent, Jemena, rather than the taxpayer.

### Climate impact

ECNT is very concerned that the amount of greenhouse gas emissions generated by this project has not been measured. Furthermore, it is highly concerning that the proponent has not proposed to offset its climate impact in any way.

### Lack of offsets

Jemena has not proposed to offset its significant environmental impact despite the opportunity to purchase carbon credits or to offset native vegetation loss.

### Conclusion

ECNT wishes to object to the approval of the proposed Northern Gas Pipeline on the following grounds.

1. That the proponent, Jemena, has failed to present a compelling case for why this proposed development should go ahead, given that the economic and medium-term employment benefits are at best negligible when weighed up against its costs.
2. That the NT Government has failed to consult the community about this proposal, or to investigate more sustainable alternatives, including a large scale solar plant project.
3. That in supporting this project to date, the NT Government has not taken into consideration the significant level of community opposition to shale gas fracking which it has acknowledged with a moratorium on shale gas fracking.
4. That in supporting this project to date, the NT Government is in conflict with its own Renewable Energy Target of 50% by 2030.
5. That a thorough assessment of the project's potential climate impact was not undertaken as part of the Draft EIS, which contravenes Australia's commitment to mitigate its greenhouse gas emissions under the 2015 Paris Agreement.
6. That the proponent, Jemena, has not attempted to offset this project's climate impact, water use or habitat loss.

7. That the proponent, Jemena, has made several presumptions in this Draft EIS which pose an unacceptable risk that the wishes of Traditional Owners of lands affected by this proposal will be ignored, and that the environmental impacts of this proposal are grossly underestimated.
8. That the amount of water proposed to be extracted via a Compressing Station at Phillip Creek site (4800 litres/day) is unsustainable, given the site is located in an arid zone where water is scarce and groundwater aquifers may take thousands of years to recharge.
9. That the amount of toxic wastewater produced from this same process is too large to be managed or treated appropriately without polluting the surrounding area and groundwater aquifers.
10. Insufficient information was provided to demonstrate that the amount of groundwater required to allow hydrostatic testing of the pipeline (22,000,000 litres) and construction (69,000,000 litres) as well as drinking water for construction camps (20,000,000 litres), equivalent to 111 megalitres, is sustainable.
11. That the project requires clearing of a significant amount of remnant vegetation (2,470 ha).
12. That the Matters of National Environmental Significance were not properly considered as two species observed during surveys of the region over a 12 month period and three species determined to be likely to be present were considered to be at risk from the proposed development. Four species which are found in the region but were undetected during surveys were not considered to be at risk. These include the Greater Bilby, Brush-tailed Mulgara, Gouldian Finch and Latz's Grass. Another six species could occur in the region, including the Night Parrot and Princess Parrot which are notoriously rare. The risk of this proposal impacting upon these species should be properly assessed.

## Contact

Glenn Evans, Acting Executive Officer

p. 08 8981 1984

e. [admin@ecnt.org](mailto:admin@ecnt.org)